

Abstract of the Disclosure

A robust genotyping method using a DNA chip is provided. In the DNA chip used in the genotyping method, optimal probe pairs of a wild-perfect match probe and a mutant-perfect match probe are immobilized for each mutation site on a substrate. The method includes setting up a genotyping algorithm using data obtained from hybridization of an identified standard nucleic acid to the DNA chip, and genotyping an unknown target nucleic acid by substituting input vectors that are calculated from hybridization of the target nucleic acid to the DNA chip into the genotyping algorithm. The results of genotyping the target nucleic acid using the optimal probe pairs for each mutation site are statistically robust to errors.